Introduction to PHP for Web Development: Hands-On - 2 Days

Course 519 Overview

You Will Learn How To

- Write interactive PHP web applications
- Employ PHP in web services architectures
- Create reusable, structured PHP code that separates logic from presentation
- Develop database-driven web applications using MySQL, SQLite and MS Access files
- Leverage the high-performance PHP Data Object (PDO) database API
- Track users as they navigate your site

Who Should Attend

Those creating dynamic, database-driven websites. Experience with HTML and exposure to basic programming terminology are assumed.

Hands-On Exercises

In this course, you write PHP code to accomplish targeted outcomes, culminating in the development of an interactive, database-driven web application. Exercises include:

- Building modular scripts to enable code reusability
- Effectively using variables, constants and PHP expressions
- Applying PHP control structures to create a logical flow of execution
- Employing user-defined functions and PHP internal functions
- Tracking user navigation on your website
- Integrating database content to generate dynamic web pages

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Course 519 Outline

Introduction to PHP

Web services architectures and PHP

- Origins of PHP in the open source community
- Exploring the PHP application architecture
- Investigating the PHP role in web services architecture
- Leveraging the PHP development environment checklist
- Installing a complete development platform from scratch

PHP language basics

- Defining PHP language conventions
- Investigating PHP variable and data types
- Exploring the use of constants
- Examining classes and objects

Implementing PHP Code

Accommodating transient data

- Storing values in scalar variables
- Employing ordinary and associative arrays
- Accessing global variables
- Embedding PHP code into HTML pages

PHP expressions and functions

- Writing user-defined functions to structure your code
- Passing arguments and default values to functions
- Returning data from functions
- Building code libraries for reusability
- Incorporating external PHP scripts with require and require_once

Employing PHP code in your environment

- Writing conditional expressions
- Implementing loops such as while, for and foreach
- Building complete scripts that incorporate loops and conditional expressions

Exploiting the built-in functionality of PHP

- Manipulating string data
- Reading and writing data using file I/O functions
- Surveying categories of PHP functions

Building Complete Database-Driven Web Applications

Crafting database connections

- Examining Data Source Names (DSN) attributes
- Constructing proper DSNs
- Determining differences between DSNs

Applying the fundamentals of object-oriented PHP Data Object (PDO) technology

- Creating and manipulating PDO objects
- Executing SQL queries through PDO objects
- Retrieving query results as associative arrays with PDO object methods
- Looping through database result sets
- Integrating returned data into web applications
- Closing the PDO database connection

Interacting with the Client

Incorporating user input

- Determining how data is sent from forms to PHP scripts
- Retrieving form data with $_POST and $_GET arrays
- Validating retrieved data
- Strategies for handling invalid input

Responding to user input

- Storing state information using cookies
- Creating dynamically generated hyperlinks to call PHP scripts
- Presenting the user with input options via different HTML form elements

Applying conditional redirection

- Examining state information from cookies
- Determining application context based upon state information
- Applying conditional logic to redirect to the correct contextual page

Extending Functionality with PHP

Debugging and deploying

- Discovering common PHP coding problems
- Exploring methods of debugging PHP
- Suppressing on-screen error messages on production servers
- Considering deployment configuration and security
- Configuring the php.ini file to control error messages

PHP object-orientation

- Differences between PHP and other object-oriented language constructs
- PHP object-oriented glossary

Integrating Ajax into PHP applications

- Outlining Ajax with a brief description
- Demonstrating the integration of Ajax with a PHP application

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